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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,073

01/25/2005

Peter James Duffett-Smith

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EXAMINER
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BOLOURCHI, NADER

ART UNIT	PAPER NUMBER
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2611

MAIL DATE	DELIVERY MODE
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09/20/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/518,073	<b>Applicant(s)</b> DUFFETT-SMITH ET AL.	
	<b>Examiner</b> Nader Bolourchi	<b>Art Unit</b> 2611	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 December 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 and 23-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 and 23-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### Response to Amendment

1. The amendment filed 12/16/2004 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: " page 8: lines 10-14; page9: lines 9-15; page 11: lines 13-19; page 13: lines 5-11 and lines 26-33; page 14: lines 18-24; and page 15: lines 11-17".

Examiner notes that Applicant, in the International Preliminary Examination report (PCT 409) mailed October 25, 2004, has been properly advised that (emphasis added):

Thus, it would appear that the amendments to the claims, filed with the letter of the applicant of August 11 2004, go beyond the content of the application as originally filed.

The amendments to the description, filed with the letter of the applicant dated August 11 2004, were intended to bring the description into accordance with the claims. However, as the amendments to the claims were deemed inadmissible, the subsequent amendments to the text of the description was deemed also inadmissible.

Subject to the conditions of Rule 70.2(c), the international Report is based on the application documents as originally filed.

Applicant is required to cancel the new matter in the reply to this Office Action.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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2. Claims 1, 9, and 23-32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The new matter includes in claims 1, 9, 23-24: sections (c) and (d); claims 25 and 26: sections (b) and (c); and claims 27-32: sections 1 and 2.

Examiner notes that Applicant in the International Preliminary Examination report (PCT 409) mailed October 25, 2004 has been properly advised that (emphasis added):

Thus, it would appear that the amendments to the claims, filed with the letter of the applicant of August 11 2004, go beyond the content of the application as originally filed.

The amendments to the description, filed with the letter of the applicant dated August 11 2004, were intended to bring the description into accordance with the claims. However, as the amendments to the claims were deemed inadmissible, the subsequent amendments to the text of the description was deemed also inadmissible.

Subject to the conditions of Rule 70.2(c), the international Report is based on the application documents as originally filed.

Claims 2-8, 10-21 and 33 are also rejected due to their dependency to the rejected independent claims 1, 9, and 23-32.

**The following is based on the application documentation as originally filed:**

***Priority***

3. It is noted that this application appears to claim subject matter disclosed in prior Application No. PCT/GB03/01943, filed 5/13/2003. A reference to the prior application must be inserted as the first sentence(s) of the specification of this application or in an application data sheet (37 CFR 1.76), if applicant intends to rely on the filing date of the prior application under 35 U.S.C. 119(e), 120, 121, or 365(c). See 37 CFR 1.78(a). For benefit claims under 35 U.S.C. 120, 121, or 365(c), the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of all nonprovisional applications. If the application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference to the prior application must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during the pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e),

120, 121 and 365(c). A benefit claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed benefit claim under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If the reference to the prior application was previously submitted within the time period set forth in 37 CFR 1.78(a), but not in the first sentence(s) of the specification or an application data sheet (ADS) as required by 37 CFR 1.78(a) (e.g., if the reference was submitted in an oath or declaration or the application transmittal letter), and the information concerning the benefit claim was recognized by the Office as shown by its inclusion on the first filing receipt, the petition under 37 CFR 1.78(a) and the surcharge under 37 CFR 1.17(t) are not required. Applicant is still required to submit the reference in compliance with 37 CFR 1.78(a) by filing an amendment to the first sentence(s) of the specification or an ADS. See MPEP § 201.11.

***Specification***

4. The disclosure is objected to under 37 CFR 1.71, as being so incomprehensible as to preclude a reasonable search of the prior art by the examiner. For example, the following items are not understood: Terms such as "blurred estimate", "Section of a representation", "Blurred terminal section" etc. Further ambiguity with regard to the meaning of the term "blurring" was introduced. The specification on page 8, lines 15-17, defines "blurring" as the process of making the edges of signals less clearly defined in time due to non-linear effects, multipath and noise in the transmission channel. This cannot, however, be derived from the priority document, EPO application number 02254215.3 (page 17: line 10), or specification (page 17: line 21), which defines "blurring" as convolution, without any restriction to non-linear effects, multipath and noise. Consequently, the search has been carried out for those parts of the application which do appear to be clear and concise, namely those outlined on pages 16-20.

5. Applicant is reminded of the proper content of a specification of the disclosure:

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:

- (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
- (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.



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- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

### ***Claim Objections***

6. Claims 4-8 and 12-22 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claims 4-8 and 12-22 have not been further treated on the merits.

### **Claim Rejections - 35 USC § 112, second paragraph**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1, 9, and 23-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 9, and 23-30 recites phrase "Blured estimate" (line 10 of claims 1, 9, 23-24, line 12 of claim 25; line 8 of claim 26, line 16 of claim 27-28, and line 12 of claims 29-30), which term "blured" makes it vague and unclear. It is not clear what term "blured" is referring to. In particular, the specification on page 8, lines 15-17, defines "blurring" as the process of making the edges of signals less clearly defined in time due to non-linear effects, multipath and noise in the transmission channel. This cannot, however, be derived from the priority document, EPO application number 02254215.3 (page 17: line 10) , or specification (page17: line 21), which defines "blurring" as convolution, without any restriction to non-linear effects, multipath and noise.

Claim 1 recites "(c) calculating a blurred estimate of the signal received at the terminal from the first transmitter using a first function dependent on the first section and the section created at the terminal in step (a)". However, the method of calculating the blurred estimate is considered ambiguous. It is not clear whether the blurred estimate is calculated using a first function and the section created at the terminal in step (a); or whether the blurred estimate is :calculated using the first function is based on the section created at the terminal in step (a). The above is also applicable to claims 9, 23-26.

Claims 2-8, and 10-22 are rejected due to its dependency to rejected claims 1 and 9, respectively.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 1, 9, and 23-30 are rejected under 35 U.S.C. 101 because the claimed invention is not supported by either a specific and substantial asserted utility or a well established utility. Claim 1, 9, and 13-28 refer to finding a time offset. Claims 29 and 30 refer to a computing device. Because the claimed invention is not supported by a specific asserted utility for the reasons set forth above, credibility cannot be assessed.

Claim 1, 9, and 23-30 also rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a specific and substantial asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 9, 23-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Ottosson et. al (WO 00/55992).

Regarding claims 1, 9, 23-26, Ottosson et. al disclose an apparatus and method of finding the time offset between signals transmitted by at least one of a plurality of transmitters of a communications network (Fig. 2) and received by a receiver attached to a terminal (A well-known process in CDMA communications systems as disclosed by Ottosson et. al. This procedure is carried out for at a base station for each received signal), comprising: (a) creating at the terminal a section of a representation of the signals from the transmitters received by the receiver (output of 430 in Fig. 4); (b) creating a first section of a representation of the signal transmitted by a first of said transmitters, and creating a second section of representation of the signal transmitted by a second of said transmitters, each of which sections overlaps in time with the section created at the terminal (page 12: lines 12-14; Signal used in correlator 405 in Fig. 4); (c) calculating a blurred estimate of the signal received at the terminal from the first transmitter using a first function dependent on the first section and the section created at the terminal in step (a) (Fig. 4: 430); (d) creating a blurred terminal section using a second function dependent on the first section and the section created at the terminal in step (a) (Fig. 4: 435); (e) subtracting the blurred estimate from the blurred terminal section to produce a blurred residual representation (see Fig. 4: output of summation circuit); and (f) estimating the time offset between the blurred residual representation and the second section (Fig. 4: 415)

***Remarks***

10. No claim is allowed.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. All references recited in International Search Report (PCT 210) mailed on December 4, 2003.

***Contact Information***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nader Bolourchi whose telephone number is (571) 272-8064. The examiner can normally be reached on M-F 8:30 to 4:30.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David. C. Payne can be reached on (571) 272-3024. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

Nader Bolourchi

09/06/2007

  
DAVID C. PAYNE  
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